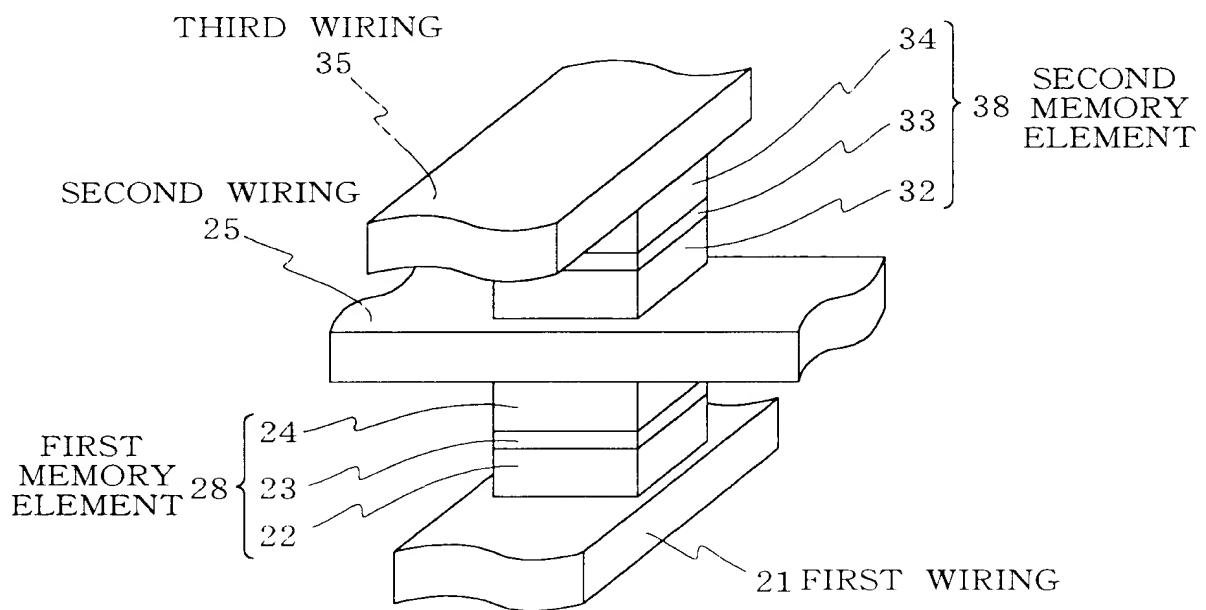
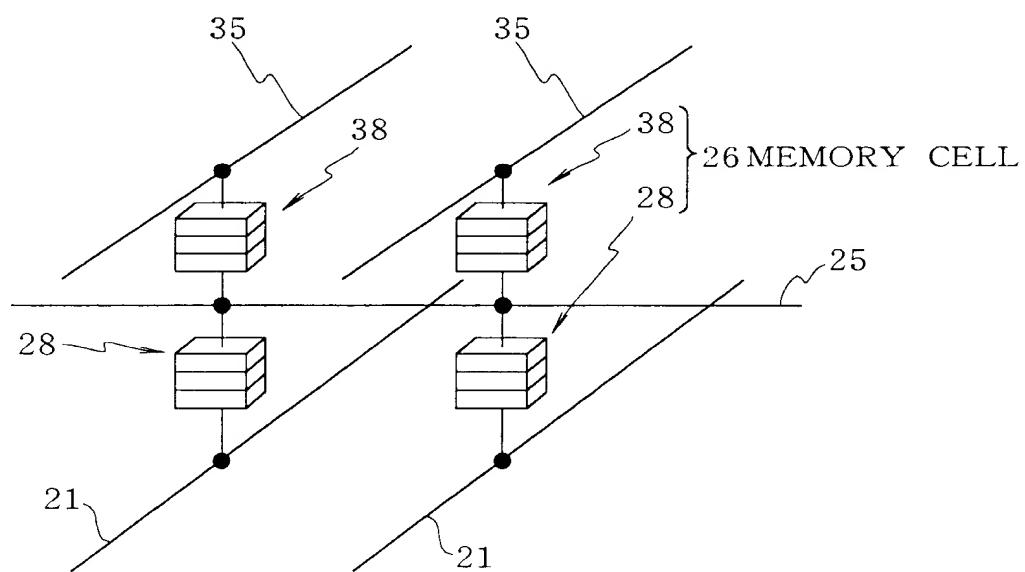
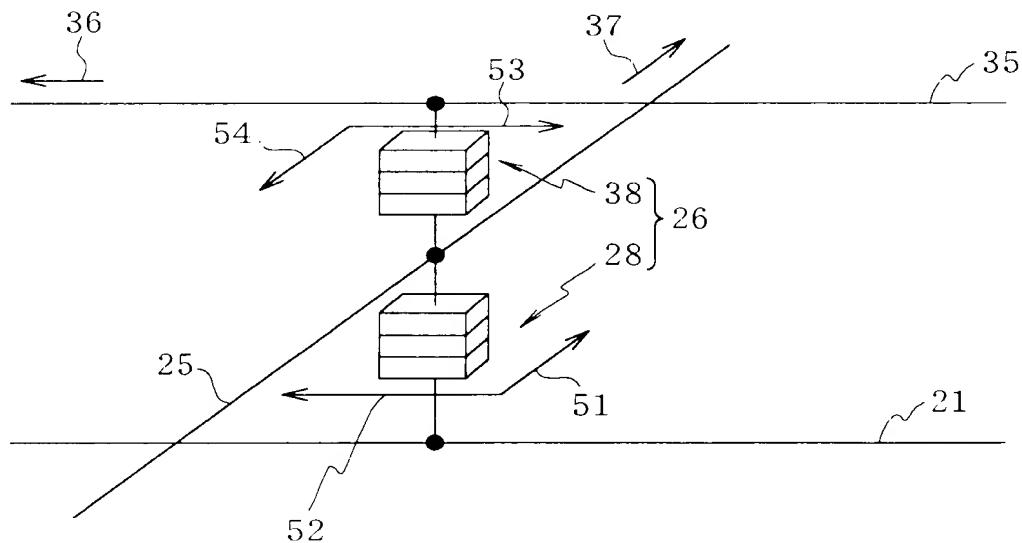
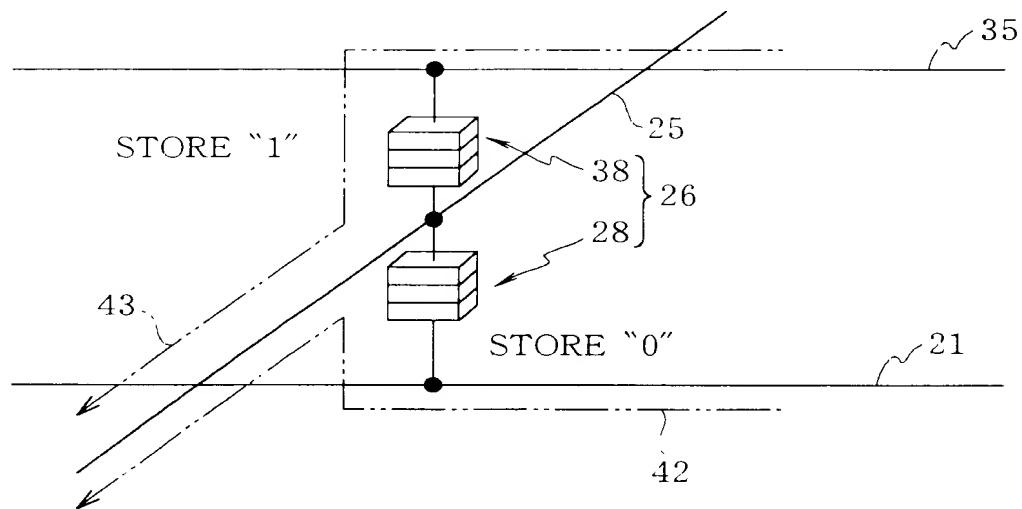


FIG. 1(a)**FIG. 1(b)**

22 : FIRST PINNED LAYER
 23 : FIRST INSULATION LAYER
 24 : FIRST DATA STORAGE LAYER
 32 : SECOND PINNED LAYER
 33 : SECOND INSULATION LAYER

FIG. 2 (a)**FIG. 2 (b)**

36 : FIRST DIRECTION

37 : SECOND DIRECTION

42 : READ CURRENT PATH OF FIRST MEMORY ELEMENT 28

43 : READ CURRENT PATH OF SECOND MEMORY ELEMENT 38

51 : MAGNETIC FIELD IN FIRST MEMORY ELEMENT 28
CAUSED BY FIRST WIRING 2152 : MAGNETIC FIELD IN FIRST MEMORY ELEMENT 28
CAUSED BY SECOND WIRING 2553 : MAGNETIC FIELD IN SECOND MEMORY ELEMENT 38
CAUSED BY SECOND WIRING 2554 : MAGNETIC FIELD IN SECOND MEMORY ELEMENT 38
CAUSED BY THIRD WIRING 35

FIG. 3

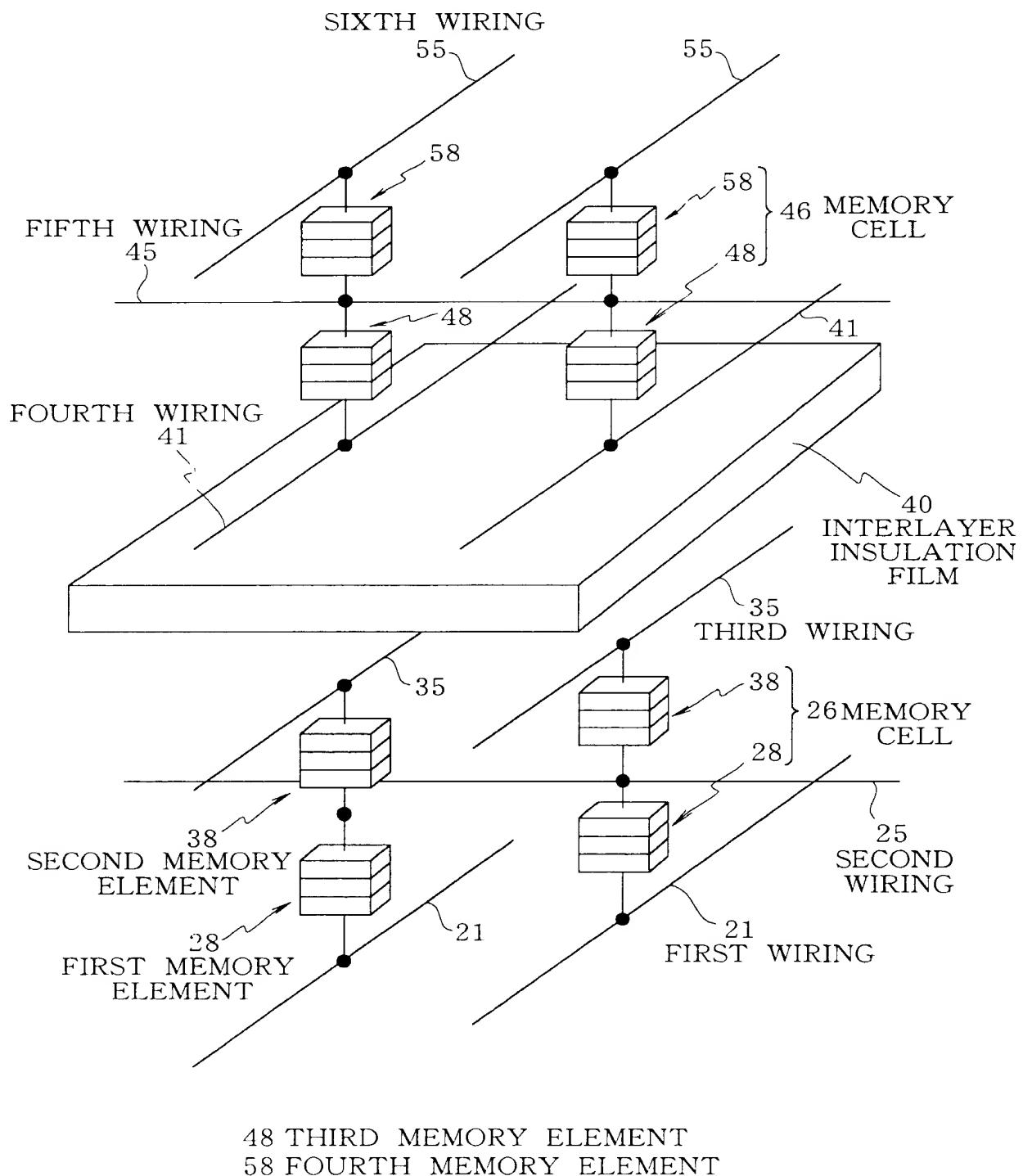


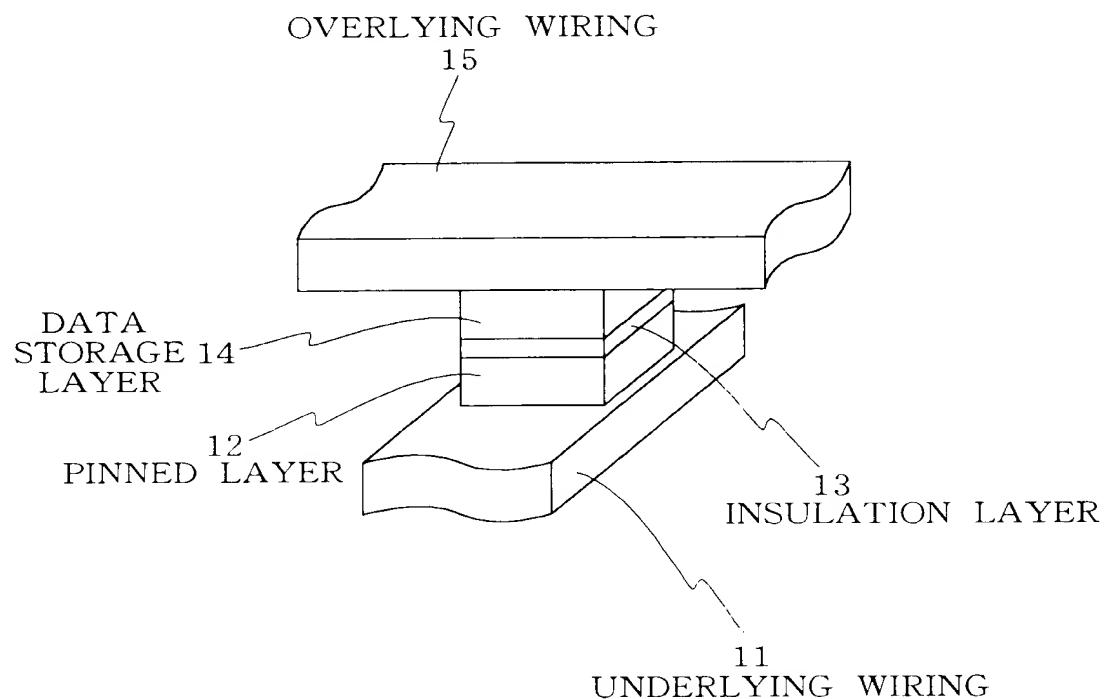
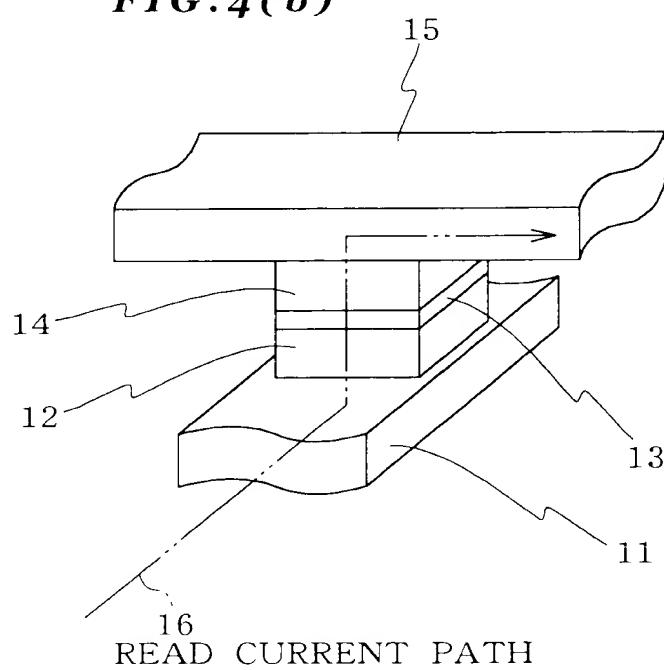
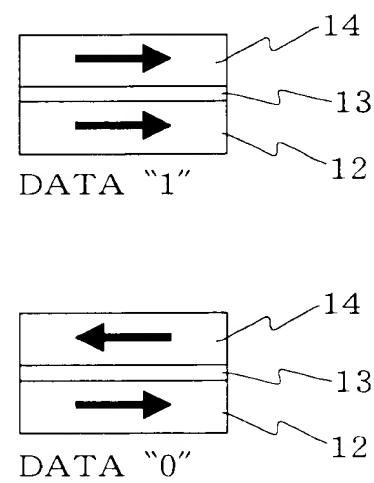
FIG. 4(a)**FIG. 4(b)****FIG. 4(c)**

FIG. 5